

10/033,835

(FILE 'HOME' ENTERED AT 14:14:45 ON 06 JAN 2003)

FILE 'CAPLUS' ENTERED AT 14:14:55 ON 06 JAN 2003

L1	22795 S	CYCLODEXTRIN
L2	29158 S	NICOTINIC
L3	18033 S	NICOTINAMIDE
L4	4739 S	NIACIN
L5	851 S	NIACINAMIDE
L6	49076 S	L2 OR L3 OR L4 OR L5
L7	82 S	L1 AND L6
L8	266787 S	SOLUBILITY OR SOLUBILIZ?
L9	15 S	L7 AND L8

L9 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2002:72162 CAPLUS  
 DOCUMENT NUMBER: 136:107569  
 TITLE: Gel compositions containing metronidazole and hydroxypropyl-.beta.-cyclodextrin  
 INVENTOR(S): Chang, Yunik; Dow, Gordon J.; Angel, Arturo  
 PATENT ASSIGNEE(S): Dow Pharmaceutical Sciences, USA  
 SOURCE: PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002006349	A1	20020124	WO 2001-US19644	20010619
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6468989	B1	20021022	US 2000-615169	20000713
PRIORITY APPLN. INFO.: US 2000-615169 A 20000713				
AB An aq. soln. of metronidazole in which the concn. of metronidazole is >0.75 is described. The soln. contains the soly. enhancer hydroxypropyl-.beta.-cyclodextrin (I) and may addnl. contain niacinamide. Methods of manuf. and therapeutic use of the soln. are disclosed. Thus, a stable 1.0% aq. gel compn. contained metronidazole 1.00, I 5.00, methylparaben 0.15, propylparaben 0.03, glycerin 5.00, hydroxyethyl cellulose 1.50, disodium edetate 0.05, and water qs to 100%.				
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L9 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:380370 CAPLUS  
 DOCUMENT NUMBER: 135:9995  
 TITLE: Pharmaceuticals containing sildenafil for treating male erectile dysfunction  
 INVENTOR(S): Vallabhaneni, Ramakrishna Rao  
 PATENT ASSIGNEE(S): Natco Pharma Ltd., India  
 SOURCE: PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001035926	A2	20010525	WO 2000-IN105	20001024
WO 2001035926	A3	20011227		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1237538	A2	20020911	EP 2000-990872	20001024
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRIORITY APPLN. INFO.: IN 1999-MA1128 A 19991118 WO 2000-IN105 W 20001024				
AB The invention relates to a novel pharmaceutical compn. contg. sildenafil useful for nasal administration in the treatment of male erectile dysfunction due to a variety of causes. The compn. is also effective in patients with erectile dysfunction due to spinal cord injury. The pharmaceutical compn. is in the form of a soln. or a colloidal dispersion in a vehicle filled into a specially designed dosing device for nasal administration. The invention also provides a method for prep. the				

compn. contg. sildenafil for nasal application for the treatment of male erectile dysfunction. Thus, a formulation contained sildenafil citrate 10.000, PEG-300 30.000, glycerol 20.000, and HCl 10.000% and water to 1.0 mL.

L9 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:642586 CAPLUS

DOCUMENT NUMBER: 133:308801

TITLE: Reconstitution of conformationally dependent epitopes on the N-terminal extracellular domain of the human muscle acetylcholine receptor .alpha. subunit expressed in Escherichia coli: implications for myasthenia gravis therapeutic approaches

AUTHOR(S): Tsouloufis, Theodoros; Mamalaki, Avgi; Remoundos, Michael; Tzartos, Socrates J.

CORPORATE SOURCE: Department of Biochemistry, Hellenic Pasteur Institute, Athens, 11521, Greece

SOURCE: International Immunology (2000), 12(9), 1255-1265  
CODEN: INIMEN; ISSN: 0953-8178

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Myasthenia gravis (MG) is an autoimmune disease, caused by autoantibodies against the muscle acetylcholine receptor (AChR), an oligomeric transmembrane glycoprotein composed of .alpha.2.beta..gamma..delta. subunits. The .alpha. subunit carries in its N-terminal extracellular domain the main immunogenic region (MIR), a group of conformationally dependent epitopes that seems to be a major target for the anti-AChR antibodies in MG patients. Detailed epitope studies on pathogenic anti-AChR antibodies have been hindered because the binding of most of these antibodies is conformationally dependent, which precludes the use of denatured AChR fragments. The N-terminal extracellular fragment, residues 1-207, of the human AChR .alpha. subunit was expressed in Escherichia coli in a denatured form, solubilized in a guanidinium hydrochloride-contg. buffer, purified, and renatured using a refolding approach which employs a detergent and a cyclodextrin as "artificial chaperones". Compared with the non-refolded protein, the refolded mol. exhibited a dramatic improvement in terms of the binding of all anti-MIR mAb tested. Anti-MIR mAb that normally bind weakly to the denatured .alpha. subunit bound approx.30-100 times better to the refolded polypeptide and other anti-MIR mAb that bind exclusively to completely conformationally dependent epitopes also bound quite efficiently. These results, in addn. to providing a means for the thorough investigation of the antigenic structure of the AChR, show that the conformationally dependent MIR epitopes do not require the participation of the oligosaccharide moiety of the .alpha. subunit nor the contribution of neighboring subunits for antibody binding. Such AChR fragments may be used in structural studies of the AChR autoantigen, and should prove valuable in the understanding and development of therapeutic approaches for MG.

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:129840 CAPLUS

DOCUMENT NUMBER: 132:260007

TITLE: Propofol in anesthesia. Mechanism of action, structure-activity relationships, and drug delivery

AUTHOR(S): Trapani, Giuseppe; Altomare, Cosimo; Sanna, Enrico; Biggio, Giovanni; Liso, Gaetano

CORPORATE SOURCE: Dipartimento Farmaco-Chimico, Facolta di Farmacia, Universita degli Studi di Bari, Bari, 70125, Italy

SOURCE: Current Medicinal Chemistry (2000), 7(2), 249-271  
CODEN: CMCHE7; ISSN: 0929-8673

PUBLISHER: Bentham Science Publishers

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 112 refs. Propofol (2,6-diisopropylphenol) is becoming the i.v. anesthetic of choice for ambulatory surgery in outpatients. It is extensively metabolized, with most of the administered dose appearing in the urine as glucuronide conjugates. Favorable operating conditions and rapid recovery are claimed as the main advantages in using propofol, whereas disadvantages include a relatively high incidence of apnea, and blood pressure redns. Besides a literature summary of the pharmacodynamics, pharmacokinetics, toxicol., and clin. use, this review provides a deeper discussion on the current understanding of mechanism of action and structure-activity relationships, and recent findings on drug delivery technologies as applied to the improvement of propofol

formulations. The action of propofol involves a pos. modulation of the inhibitory function of the neurotransmitter .gamma.-aminobutyric acid (GABA) through GABAA receptors. Recent results from recombinant human GABAA receptor expts. and findings from the work exploring the effects at other receptors (e.g., glycine, nicotinic, and M1 muscarinic receptors) are reviewed. Studies showing its antiepileptic and anxiolytic properties are also discussed. The structure-activity relationships (SAR) of series of alkylphenols and p-X-substituted congeners have been reinvestigated. Interestingly, unlike the other congeners tested so far, p-iodo-2,6-diisopropylphenol displayed anticonvulsant and anticonflict effects, but not sedative-hypnotic and anesthetic properties. Due to its high lipid-soly., propofol was initially formulated as a soln. with the surfactant Cremophor EL, but the occurrence of pain on injection and anaphylactoid reactions prompted to search for alternative formulations. Results from using cyclodextrins, water-sol. prodrugs, and adopting Bodor's approach to the site-specific chem. delivery system (CDS), as well as the advantages provided by computer-controlled infusion systems, are examd. in some detail.

REFERENCE COUNT: 112 THERE ARE 112 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:457628 CAPLUS

DOCUMENT NUMBER: 131:204473

TITLE: Increased aqueous solubility of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine by coprecipitating with various pharmaceutical carriers

AUTHOR(S): Planinsek, Odon; Pisek, Robert; Kristl, Albin; Schmidt, Peter C.; Srcic, Stanko

CORPORATE SOURCE: Faculty of Pharmacy, University of Ljubljana, Ljubljana, 1000, Slovenia

SOURCE: Acta Pharmaceutica (Zagreb) (1999), 49(2), 89-98

CODEN: ACPHEE; ISSN: 1330-0075

PUBLISHER: Croatian Pharmaceutical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine, which is a modified N-acetylmuramyl-L-alanyl-D-isoglutamine (MDP, the smallest immunol. active glucopeptide's subunit of the bacterial cell wall), was chosen after immunorestitution tests for further preclin. testing. For the prepn. of an appropriate parenteral formulation, the soly. of the compd. has to be increased. For this purpose different phys. mixts. and solid dispersions prepd. by solvent evapn. method with different carriers were investigated. The soly. of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine increased from 0.16 g L-1 to 27 g L-1 for the dispersion with nicotinamide, to 40 g L-1 for the dispersion with sodium salicylate and to 24 g L-1 for the complex with 2-hydroxypropyl-.beta.-cyclodextrin.

L9 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:172599 CAPLUS

DOCUMENT NUMBER: 130:213640

TITLE: New pharmaceutical compositions of meloxicam with improved solubility and bioavailability

INVENTOR(S): Struengmann, Andreas; Freudensprung, Brigitte; Klokke, Karin

PATENT ASSIGNEE(S): Hexal A.-G., Germany

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909988	A1	19990304	WO 1998-EP5456	19980827
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2301304	AA	19990304	CA 1998-2301304	19980827
AU 9894374	A1	19990316	AU 1998-94374	19980827

AU 750125	B2	20020711		
ZA 9807800	A	19990609	ZA 1998-7800	19980827
EP 1007049	A1	20000614	EP 1998-947467	19980827
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9812018	A	20000926	BR 1998-12018	19980827
JP 2001513563	T2	20010904	JP 2000-507378	19980827
US 6284269	B1	20010904	US 2000-486463	20000510

## PRIORITY APPLN. INFO.:

EP 1997-114816	A	19970827
WO 1998-EP5456	W	19980827

AB Pharmaceutical compns. contg. enolic carboxamide type antiinflammatory agent meloxicam that exhibit improved wettability, aq. soly., dissoln. behavior over a broad range of pH, and that are prepd. by crystal structure modification of the drug through dry or wet mech. homogenization with two further components - one of them is selected from a group of oligo - and dissoln. improving, or alkalizing agent. The application of the formulations according to the present invention results in an improved bioavailability and effectiveness of meloxicam. Thus, 16 g hydroxypropyl .beta.-cyclodextrin was mixed with 1.8 g of meloxicam and the mixt. was then further co-milled for 3 h at 25.degree. to reach desired metastable phys. state. A hydrogel formulation contained above powder 100.0, hydroxypropyl Me cellulose 21.0, propylene glycol 2500.0, PEG-7-glyceryl conconate 300.0, iso-Pr alc. 500.0, and water 6385.0 mg.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## L9 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:724416 CAPLUS  
DOCUMENT NUMBER: 128:16342  
TITLE: Increasing solubility of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine in water solutions  
AUTHOR(S): Planinsek, O.; Srcic, S.; Kristl, A.  
CORPORATE SOURCE: Faculty of Pharmacy, Univ. of Ljubljana, Ljubljana, 1000, Slovenia  
SOURCE: Farmacevtski Vestnik (Ljubljana) (1997), 48(Pos. Stev.), 274-275  
CODEN: FMVTAV; ISSN: 0014-8229  
PUBLISHER: Slovensko Farmacevtsko Drustvo  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Using carriers nicotinamide, Na salicylate, 2-hydroxypropyl .beta.-cyclodextrin (HPC) and lecithin, the water soly of N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine (I) was increased. Results show a nonequil. state and they decrease after a certain time. However, the solubilities remain higher than soly. of pure I which can be attributed to disruption of the water structure. Complexes were formed in the case of Na salicylate, nicotinamide, and HPC, and vesicles were formed in the case of lecithin.

## L9 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:175664 CAPLUS  
DOCUMENT NUMBER: 118:175664  
TITLE: Effect of hydrotropic substances on the complexation of clotrimazole with .beta.-cyclodextrin  
AUTHOR(S): Pedersen, Morten  
CORPORATE SOURCE: Dep. Pharm., R. Dan. Sch. Pharm., Copenhagen, DK 2100, Den.  
SOURCE: Drug Development and Industrial Pharmacy (1993), 19(4), 439-48  
CODEN: DDIPD8; ISSN: 0363-9045  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The phase diagrams of clotrimazole/.beta.-cyclodextrin (.beta.-CD) in phosphate buffer, pH 7.1, contg. 0.5M various hydrotropic agents were constructed. The water structure disruptors, urea and nicotinamide, increased the intrinsic soly. of the antimycotic drug clotrimazole, while the water structure forming agents, sorbitol and fructose, decreased the soly. Concerning the complex const. between clotrimazole and .beta.-CD, it was the other way around. The connection between the slopes of the phase diagrams, the intrinsic soly. of clotrimazole and the complex const. was discussed. Nicotinamide decreased the soly. of .beta.-CD in the buffer soln. The results reported in this study are in disagreement with the claim that addn. of water structure forming agents to cyclodextrin solns. can be used to increase the total soly. of drugs.

L9 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:478756 CAPLUS  
DOCUMENT NUMBER: 115:78756  
TITLE: Effect of hydrotropic substances on the complexation of sparingly soluble drugs with cyclodextrin derivatives and the influence of cyclodextrin complexation on the pharmacokinetics of the drugs  
AUTHOR(S): Mueller, B. W.; Albers, E.  
CORPORATE SOURCE: Dep. Pharm., Christian Albrecht Univ., Kiel, D-2300/1, Germany  
SOURCE: Journal of Pharmaceutical Sciences (1991), 80(6), 599-604  
CODEN: JPMSAE; ISSN: 0022-3549  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The influence of hydrotropic compds. on complex formation by 2-hydroxypropyl .beta.-cyclodextrin (HP-.beta.-CD) was investigated with methyltestosterone (MeT). Various representatives of the lyotropic series were used for this purpose. Additive hydrotropic effects were obsd. for nicotinamide and urea, which disrupt the water structure, while structure formers such as sorbitol exerted neg. effects. The effects of hydrotropic substances on the phase soly . relationships of MeT showed that inclusion complex formation with HP-.beta.-CD depends on the degree of ordering of the solvent and is apparently subject to entropy effects. Combined systems comprising HP-.beta.-CD and excipients with various underlying solubilizing principles were also investigated. Combination of HP-.beta.-CD with conventional solubilizers, such as 1,2-propylene glycol or sodium deoxycholate, reduced the solubilization capacity of HP-.beta.-CD. Competitive displacement of the inclusion mol. from its HP-.beta.-CD complex by sodium deoxycholate suggested that cholesterol participates in the release mechanism of the inclusion mol. under in vivo conditions. The spontaneous release of complexed drug mols. could indirectly be shown on the basis of the spontaneous action of a complexed dihydropyridine deriv. after i.v. administration in rats. The bioavailability of an investigational drug in cynomolgus monkeys could be enhanced sevenfold by inclusion complexation with HP-.beta.-CD.

L9 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:69087 CAPLUS  
DOCUMENT NUMBER: 114:69087  
TITLE: Solubility modulated drug delivery system  
INVENTOR(S): McClelland, Gregory A.; Zentner, Gaylen M.  
PATENT ASSIGNEE(S): Merck and Co., Inc., USA  
SOURCE: U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 100,664, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4946686	A	19900807	US 1989-348099	19890501
ZA 8807009	A	19890830	ZA 1988-7009	19880920
PRIORITY APPLN. INFO.:			US 1987-100664	19870924

AB A controlled-release drug delivery device comprises (1) a core compn. contg. a controlled-release soly. modulating units surrounded by a water-insol. coat contg. .gtoreq.1 pore-forming additive dispersed throughout the coat or dispersed in an individual matrix substrate and an active ingredient and (2) a water-insol. microporous wall surrounding the core compn. and prepd. from a water-permeable polymer impermeable to solute and .gtoreq.1 water-leachable pore forming additive dispersed throughout the wall. The soly. modulating agent can be an acid, a base, a complexing agent, or a surfactant. Lactose and Na dodecyl sulfate (SDS) were granulated and coated with cellulose acetate butyrate soln. to obtain controlled-release SDS followed by sorbitol soln. coating. Simvastatin, mannitol, SDS, and controlled-release SDS were granulated and formed into core tablets and coated with cellulose acetate butyrate soln., followed by sorbitol soln. coating.

L9 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:49567 CAPLUS  
DOCUMENT NUMBER: 114:49567  
TITLE: Dihydropyridine derivative redox systems for brain-targeted drug delivery  
INVENTOR(S): Bodor, Nicholas S.

10/033,835

PATENT ASSIGNEE(S): University of Florida, USA  
SOURCE: Eur. Pat. Appl., 120 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 327766	A2	19890816	EP 1988-312016	19881219
EP 327766	A3	19900926		
EP 327766	B1	19980408		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5002935	A	19910326	US 1987-139755	19871230
CA 1331564	A1	19940823	CA 1988-585791	19881213
AT 164855	E	19980415	AT 1988-312016	19881219
ES 2118707	T3	19981001	ES 1988-312016	19881219
AU 8827339	A1	19890706	AU 1988-27339	19881221
AU 619788	B2	19920206		
ZA 8809679	A	19900829	ZA 1988-9679	19881228
JP 01294663	A2	19891128	JP 1989-37	19890104
JP 3038715	B2	20000508		
EP 335545	A2	19891004	EP 1989-302719	19890320
EP 335545	A3	19900926		
EP 335545	B1	19930609		
EP 335545	B2	19980923		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 90200	E	19930615	AT 1989-302719	19890320
ES 2058503	T3	19941101	ES 1989-302719	19890320
AU 8931762	A1	19890727	AU 1989-31762	19890328
AU 618995	B2	19920116		
US 5017566	A	19910521	US 1989-431222	19891103
US 5024998	A	19910618	US 1989-448655	19891211

PRIORITY APPLN. INFO.:

US 1987-139755	A	19871230
US 1988-174945	A	19880329
CA 1988-585791	A	19881213
IE 1988-3717	A	19881213
EP 1988-312016	A	19881219
IE 1989-810	A	19890314
EP 1989-302719	A	19890320
US 1989-431222	A2	19891103

AB Inclusion complexes of hydroxypropyl, hydroxyethyl, glucosyl, maltosyl or maltotriosyl derivs. of .beta.- or .gamma.- cyclodextrin with the reduced, biooxidizable, blood-brain barrier penetrating, lipoidal forms of dihydropyridine pyridinium salt redox systems for brain-targeted drug delivery provide a means for stabilizing the redox systems, particularly against oxidn. The redox inclusion complexes also provide a means for decreasing initial drug concns. in the lungs after administration of the systems, leading to decreased toxicity. In selected instances, complexation results in substantially improved water soly. of the redox systems as well. The dihydropyridine lipidal forms are e.g. 1-methyl-3{[N-.beta.-[3,4-bis(pivalyloxy)phenyl]ethylcarbamamoyl}}-1,4-dihydropyridine and 3-hydroxy-17.beta.-[(methyl-1,4-dihydropyridin-3-yl)carbonyl]oxyetra-1,3,5(10)-triene (E2-CDS). Thus, the soly. of E2-CDS-2-hydroxypropyl .beta.-cyclodextrin complexes was .apprx.30 mg/mL vs. 0.0002 mg/mL for E2-CDS. In Sprague-Dawley rats, the lung level of an quaternary ammonium salt after i.v. administration of the complex was lower than that after i.v. administration of E2CDS.

L9 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:12071 CAPLUS  
DOCUMENT NUMBER: 114:12071  
TITLE: Molecular behavior and dissolution characteristics of uracil in ground mixtures  
AUTHOR(S): Baba, Kazuhiko; Takeichi, Yohichiro; Nakai, Yoshinobu  
CORPORATE SOURCE: Pharm. Res. Lab., Taiho Pharm. Co., Ltd., Tokushima, 771-01, Japan  
SOURCE: Chemical & Pharmaceutical Bulletin (1990), 38(9), 2542-6  
CODEN: CPBTAL; ISSN: 0009-2363  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Ground mixts. contg. uracil were prepd. by using various additives such as celluloses, proteins, cyclodextrins, enteric-coating agents and inorg. compds. in a planetary ball mill. The amorphous state of uracil was obsd. in the x-ray diffraction patterns of some of the ground mixts.

The results of IR anal. indicated deprotonation of uracil after 30 h grinding with Na polyglutamate. All ground mixts. showed the transient supersatn. of uracil in dissoln. studies. The initial amt. of uracil dissolved from the 30-h ground mixts. with Na benzoate derivs., Et cellulose, hydroxypropyl Me cellulose acetate succinate and proteins was 2.5-9-fold that dissolved from intact uracil. The crystallinity and soly. of uracil in the ground mixts. were affected by the mixing ratio, grinding time and moisture content of the additive.

L9 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1990:446267 CAPLUS  
 DOCUMENT NUMBER: 113:46267  
 TITLE: Pharmaceutical formulations for parenteral use  
 containing cyclodextrins and dihydropyridine  
 redox systems  
 INVENTOR(S): Bodor, Nicholas S.  
 PATENT ASSIGNEE(S): University of Florida, USA  
 SOURCE: Eur. Pat. Appl., 125 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 335545	A2	19891004	EP 1989-302719	19890320
EP 335545	A3	19900926		
EP 335545	B1	19930609		
EP 335545	B2	19980923		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4983586	A	19910108	US 1988-174945	19880329
EP 327766	A2	19890816	EP 1988-312016	19881219
EP 327766	A3	19900926		
EP 327766	B1	19980408		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 90200	E	19930615	AT 1989-302719	19890320
AU 8931762	A1	19890727	AU 1989-31762	19890328
AU 618995	B2	19920116		
CA 1336498	A1	19950801	CA 1989-594911	19890328
JP 02009825	A2	19900112	JP 1989-77938	19890329
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ZA 8902315	A	19901228	ZA 1989-2315	19890329
US 5017566	A	19910521	US 1989-431222	19891103
US 5024998	A	19910618	US 1989-448655	19891211

PRIORITY APPLN. INFO.:  
 US 1988-174945 A 19880329  
 EP 1988-312016 A 19881219  
 US 1987-139755 A2 19871230  
 CA 1988-585791 A 19881213  
 IE 1988-3717 A 19881213  
 IE 1989-810 A 19890314  
 EP 1989-302719 A 19890320  
 US 1989-431222 A2 19891103

AB Aq. parenteral solns. of drugs which are insol. or only sparingly sol. and/or which are unstable in water, are combined with a cyclodextrin deriv. to provide a means for alleviating problems assocd. with drug pptn. at the injection site and/or in the lungs or other organs following parenteral administration. Another approach is use of the dihydropyridine-pyridinium redox delivery system. A large no. of examples are given for synthesis of dihydropyridine and pyridinium derivs. of drugs. Data are also presented showing drug solubilization by cyclodextrin derivs.

L9 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1990:42623 CAPLUS  
 Correction of: 1989:101799  
 DOCUMENT NUMBER: 112:42623  
 Correction of: 110:101799  
 TITLE: Pharmaceuticals containing fat-soluble vitamins and  
 methylated cyclodextrin to improve  
 solubility  
 INVENTOR(S): Furukawa, Mikio; Hara, Kenji  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1



## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63083021	A2	19880413	JP 1986-227712	19860926

PRIORITY APPLN. INFO.: JP 1986-227712 19860926  
OTHER SOURCE(S): MARPAT 112:42623  
AB An oral pharmaceutical contains fat-sol. vitamins and methylated cyclodextrin I (A = H, Me; n = 6-9). A mixt. of methylated .beta.-cyclodextrin and vitamin A in H2O was stirred until complete dissoln. occurred. The resulting compd. was used in vitamin formulation. An oral liq. contained vitamin B1 nitrate 5, vitamin B2 phosphate 5, vitamin B5 5, nicotinamide 20, inositol 50, caffeine 50, vitamin A-I inclusion compd. 1, vitamin E-I inclusion compd. 10, and vitamin D-I inclusion compd. 0.5 mg in 100 mL H2O.

L9 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:101799 CAPLUS

DOCUMENT NUMBER: 110:101799

TITLE: Pharmaceuticals containing fat-soluble vitamins and methylated cyclodextrin to improve solubility

INVENTOR(S): Furukawa, Mikio; Hara, Kenji

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

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